STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PLAN LEGEND

Town, County, State		Centerline-Existing	
Property Lines		Centerline-Proposed	10+00
R/W Lines-Existing		Travelway-Existing	
R/W Lines-Proposed		Travelway-Proposed	
Culvert-Existing		Railroad	
Culvert Proposed		Catch Basins	Existing ■ Proposed
Curbing	Existing Proposed	Manholes	Existing ● Proposed
Type 1		Proposed Underdrain	
Type 3		Proposed Ditch	
Type 5		Existing Ditch	
Outline of Bodies of Water		Utility Poles	Existing ♦ Proposed
Ledge		Fire Hydrants	Existing ◉ Proposed
Buildings		Existing Water Line	
Trees	Conifer Deciduous	Existing San. Sewer	
Tree Line		Existing San. Sewer Manhole	
Clearing Limit Line	CL CL	Guardrail-Existing	
		Guardrail-Proposed	
		Guardrail-Cable, Other	

CHINA

KENNEBEC COUNTY

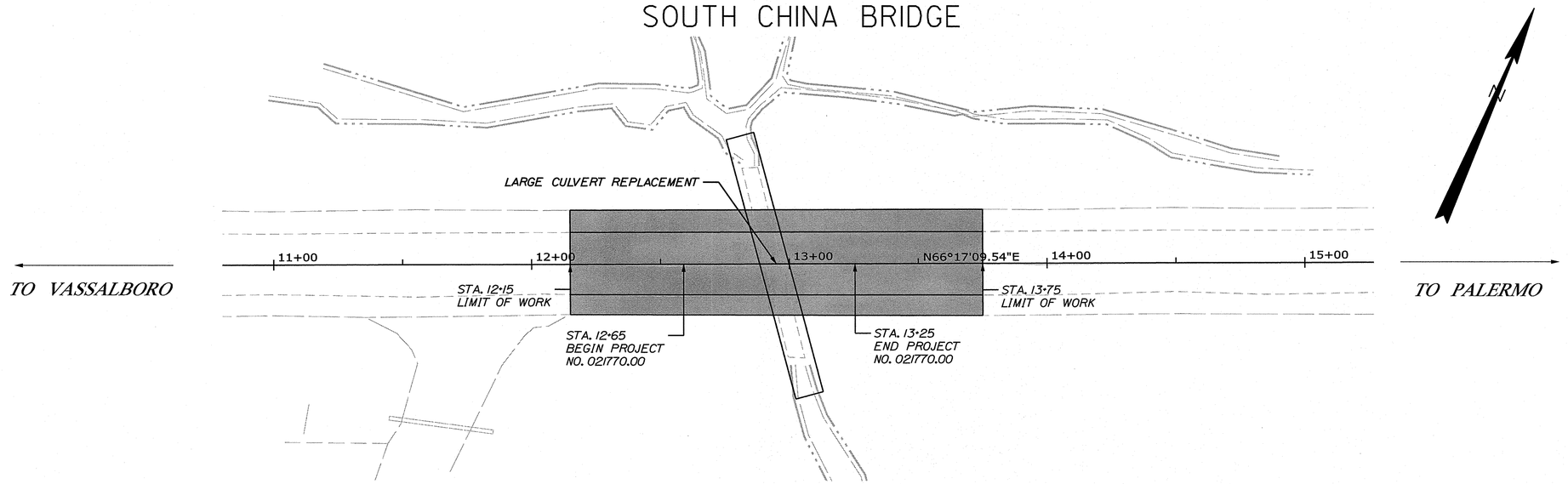
ROUTE 3\202

STATE PROJECT NO. 21770.00

BRIDGE NUMBER 6569

SOUTH CHINA BRIDGE

INDEX OF SHEETS



TRAFFIC DATA

Current (2018) AADT:	7730
Future (2030) AADT:	8190
DHV - % of AADT:	11%
Design Hourly Volume:	907
% Heavy Trucks (AADT):	8%
% Heavy Trucks (DHV):	5%
Direct. Dist. :	70%
18-KIP Equivalent P 2.0:	179
18-KIP Equivalent P 2.5:	171
Design Speed (mph):	50
Functional Class:	Other Princ. Arterial
Corridor Priority:	1

LAYOUT SCALE

25 0 25 50

Scale in Feet

PROJECT LOCATION:	APPROXIMATELY 0.22 MILES NORTHEASTERLY OF ROCKWOOD DRIVE
PROGRAM AREA:	HIGHWAY PROGRAM
SCOPE OF WORK:	LARGE CULVERT REPLACEMENT

WIN 021770.00 021770.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED

COMMISSIONER: DATE 2/21/18

CHIEF ENGINEER: DATE 2-21-18

STATE OF MAINE · NICHOLAS W. HARTLEY · 15179 · LICENSED PROFESSIONAL ENGINEER

PROJECT INFORMATION			
PROGRAM	HIGHWAY		
PROJECT MANAGER	D. COOMBS		
DESIGNER	N. HARTLEY		
CONSULTANT			
PROJECT RESIDENT			
CONTRACTOR			
PROJECT COMPLETION DATE			

SIGNATURE

P.E. NUMBER 15179

DATE 1/25/18

CHINA
ROUTE 3\202

TITLE SHEET

SHEET NUMBER

1

OF 10

Filename: ...\00\HIGHWAY\MSTA\001_Title.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:1/25/2018

GENERAL NOTES

1. ALL CLEARING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE. THE ACTUAL LINES FOR CLEARING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AS INDICATED ON THE PLANS AND APPROVED BY THE RESIDENT.

2. THE CONTRACTOR SHALL PLAN AND CONDUCT THEIR WORK ACCORDINGLY SO THAT UPON FINAL COMPLETION OF THE PROJECT THERE IS NO DROP-OFF FROM THE EDGE OF SHOULDER PAVEMENT.

3. GRANULAR BORROW USED UNDER PIPES SHALL MEET THE REQUIREMENTS FOR MATERIAL FOR UNDERWATER BACKFILL AS SPECIFIED IN STANDARD SPECIFICATION 703.19.

4. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.

5. EXISTING ABANDONED WATER MAINS BROKEN BY THE CONTRACTOR DURING CONSTRUCTION SHALL HAVE THE ENDS PLUGGED WITH BRICK AND MORTAR. COST FOR ALL LABOR AND MATERIAL WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO DIRECT PAYMENT WILL BE MADE.

6. DIRTY BORROW HAS BEEN ESTIMATED FOR ALL DISTURBED SLOPE AREAS OTHER THAN LAWN AREAS. ACTUAL PLACEMENT OF THE DIRTY BORROW SHALL BE AS NOTED ON THE PLANS OR DESIGNATED BY THE RESIDENT.

7. UNLESS OTHERWISE NOTED SEEDING METHOD NO. 1 SHALL BE UTILIZED ON ALL LAWNS AND DEVELOPED AREAS; SEEDING METHOD NO. 2 SHALL BE UTILIZED ON ALL OTHER AREAS.

8. DIRTY BORROW SHALL BE PLACED TO A NOMINAL DEPTH OF 2 INCHES UNLESS OTHERWISE NOTED OR DIRECTED.

9. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING MAILBOXES TO ENSURE THAT THE MAIL WILL BE DELIVERABLE. PAYMENT FOR THIS WORK WILL BE MADE UNDER THE APPROPRIATE RENTAL ITEMS.

10. THE CONTRACTOR IS RESPONSIBLE FOR THE CAREFUL SIDE STAKING OF EXISTING CENTERLINE AS PER STANDARD SPECIFICATION 105.6.2. SIDE STAKES SHALL BE PLACED SAFELY OUTSIDE OF THE CONSTRUCTION LIMITS AND THE EXISTING CENTERLINE GRADES SHALL BE TRANSFERRED TO THESE STAKES. THESE STAKES AND GRADES WILL BE USED TO LAYOUT CENTERLINE AND DETERMINE NEW CONSTRUCTION FINISH GRADES FROM DIFFERENTIAL ELEVATION SHEETS FURNISHED BY MAINEDOT. ALL LAYOUT, STAKES, AND GRADES WILL BE CHECKED AND MUST BE ACCEPTABLE TO THE RESIDENT.

11. ANY DAMAGE TO THE SLOPES CAUSED BY THE CONTRACTOR'S EQUIPMENT, PERSONNEL, OR OPERATION SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT. ALL WORK, EQUIPMENT, AND MATERIALS REQUIRED TO MAKE REPAIRS SHALL BE AT THE CONTRACTOR'S EXPENSE.

12. AREAS REQUIRING FILL ON THE PROJECT WILL COME FROM SUITABLE EXCAVATION FROM EXCAVATION, DITCH AND INSLOPE OR EQUIPMENT RENTAL AREAS.

13. ESTIMATED QUANTITIES FOR REQUIRED STRUCTURAL EARTH EXCAVATION, DRAINAGE AND MINOR STRUCTURES ARE INFORMATIONAL ONLY AND REPRESENT THE APPROXIMATE MINIMUM QUANTITY REQUIRED TO INSTALL DRAINAGE STRUCTURES. ADDITIONAL EXCAVATION FOR THE CONTRACTOR'S CONVENIENCE OR TO COMPLY WITH BACKSLOPING REQUIREMENTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED INCIDENTAL TO THE RELATED DRAINAGE ITEMS.

14. NO SEPARATE PAYMENT FOR SUPERINTENDENT OR FOREMAN WILL BE MADE FOR THE SUPERVISION OF EQUIPMENT AND LAYOUT OF WORK BEING PAID FOR UNDER THE EQUIPMENT RENTAL ITEMS.

15. STATIONS REFERENCED ARE APPROXIMATE.

GENERAL NOTES, CONTINUED

16. THE PROJECT GEOTECHNICAL REPORT TITLED GEOTECHNICAL DESIGN REPORT FOR THE REPLACEMENT OF SOUTH CHINA BRIDGE, SOILS REPORT 2018-04, JANUARY 24, 2018 CAN BE ACCESSED AT THE MAINEDOT WEBSITE.

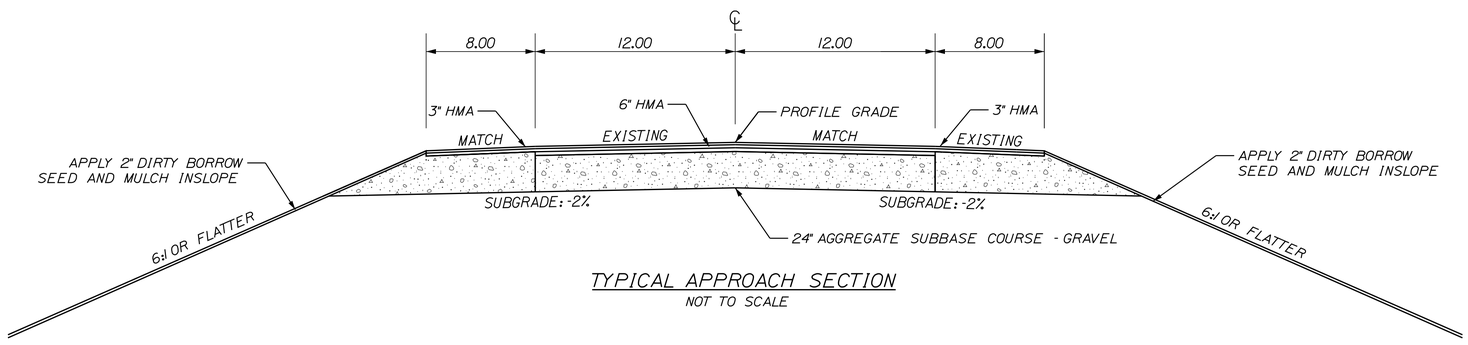
17. GEOTECHNICAL INFORMATION FURNISHED OR REFERRED TO IN THIS PLAN SET IS FOR THE USED OF THE BIDDERS AND THE CONTRACTOR. NO ASSURANCE IS GIVEN THAT THE INFORMATION OR INTERPRETATIONS WILL BE REPRESENTATIVE OF ACTUAL SUBSURFACE CONDITIONS AT THE CONSTRUCTION SITE. MAINEDOT SHALL NOT BE RESPONSIBLE FOR THE BIDDER'S OR CONTRACTOR'S INTERPRETATIONS OF OR CONCLUSIONS DRAWN FROM THE GEOTECHNICAL INFORMATION. THE BORING LOGS CONTAINED IN THE PLAN SET PRESENT FACTUAL AND INTERPRETIVE SUBSURFACE INFORMATION COLLECTED AT DISCRETE LOCATIONS. DATA PROVIDED MAY NOT BE REPRESENTATIVE OF THE SUBSURFACE CONDITIONS BETWEEN BORING LOCATIONS.

CONSTRUCTION NOTES

1. JOINTS BETWEEN EXISTING AND PROPOSED PAVEMENT SHALL BE SAW CUT. PAYMENT WILL BE CONSIDERED INCIDENTAL TO THE PAVING ITEMS.

2. DREDGE MATERIAL HAS BEEN CALCULATED TO BE APPROXIMATELY 35 CY. THIS IS INCLUDED FOR ESTIMATION PURPOSES ONLY. THE CONTRACTOR SHALL REUSE THIS MATERIAL ON SITE. IT MAY BE USED IN THE SPECIAL FILL PROVIDED IT MEETS THE REQUIREMENTS OF SPECIAL PROVISION 203 - SPECIAL FILL. IF THE MATERIAL IS NOT SUITABLE FOR THIS USE. IT MAY BE USED IN PLACE OF LOAM AS DIRECTED BY THE RESIDENT. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.

534.71 PRECAST CONCRETE BOX CULVERT
- -CONSTRUCTED IN ACCORANCE WITH SECTION 534 - PRECAST STRUCTURAL CONCRETE
- -THE FOLLOWING SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM:
  - -COMMON EXCAVATION BELOW SUBGRADE
  - -REMOVAL OF EXISTING DRAINAGE
  - -PRECAST CONCRETE TOE WALLS
- -ROCK EXCAVATION BELOW SUBGRADE WILL BE PAID UNDER ITEM 206.07.



TYPICAL APPROACH SECTION
NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021770.00

WIN
021770.00

HIGHWAY PLANS

PROJ. MANAGER	D. COMBS	BY	DATE
DESIGN-DETAILED	N. HARTLEY	----------	----------
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	C.RUSSELL	T.WHITE	OCT 2017
DESIGN3-DETAILED3	----------	----------	----------
REVISIONS 1	----------	----------	----------
REVISIONS 2	----------	----------	----------
REVISIONS 3	----------	----------	----------
REVISIONS 4	----------	----------	----------
FIELD CHANGES	----------	----------	----------

SIGNATURE

P.E. NUMBER

DATE

CHINA
ROUTE 3\202

GENERAL NOTES/TYPICAL SECTION

SHEET NUMBER

2

OF 10

TOTAL RIGHTS = 1326± S.F. (1)
TOTAL AREA = 2.0± AC. (TAX RECORDS)

PLAN

Scale of Feet: 25 0 25 50

℄ PROPOSED PRECAST CONCRETE BOX CULVERT
11' SPAN X 6' RISE X 104' LENGTH
STA. 12+94
SKEW: 15° BACK ON LEFT

POB = STA. 10+00.00

POE = STA. 15+80.83

EXISTING CHANNEL DIVERSION

TEMPORARY CONSTRUCTION CLL

1326± S.F.

LIMITS

GRADE INLET SHOW ON STREAMBED DETAILS AS DIRECTED

STA. 12+65
BEGIN PROJECT
NO. 021770.00

STA. 13+25
END PROJECT
NO. 021770.00

U.S. ROUTE 202
ROUTE 32
S.H. "28"
ROUTE 3
ROUTE 9

10+00 11+00 12+00 13+00 N66°17'09.54"E 14+00 15+00 15+81

STA. 12+15
LIMIT OF WORK

STA. 13+75
LIMIT OF WORK

REMOVE EXISTING STRUCTURE

855± S.F.

381± S.F.

TEMPORARY CONSTRUCTION CLL

LIMITS

GRADE OUTLET AS SHOWN ON STREAMBED DETAILS

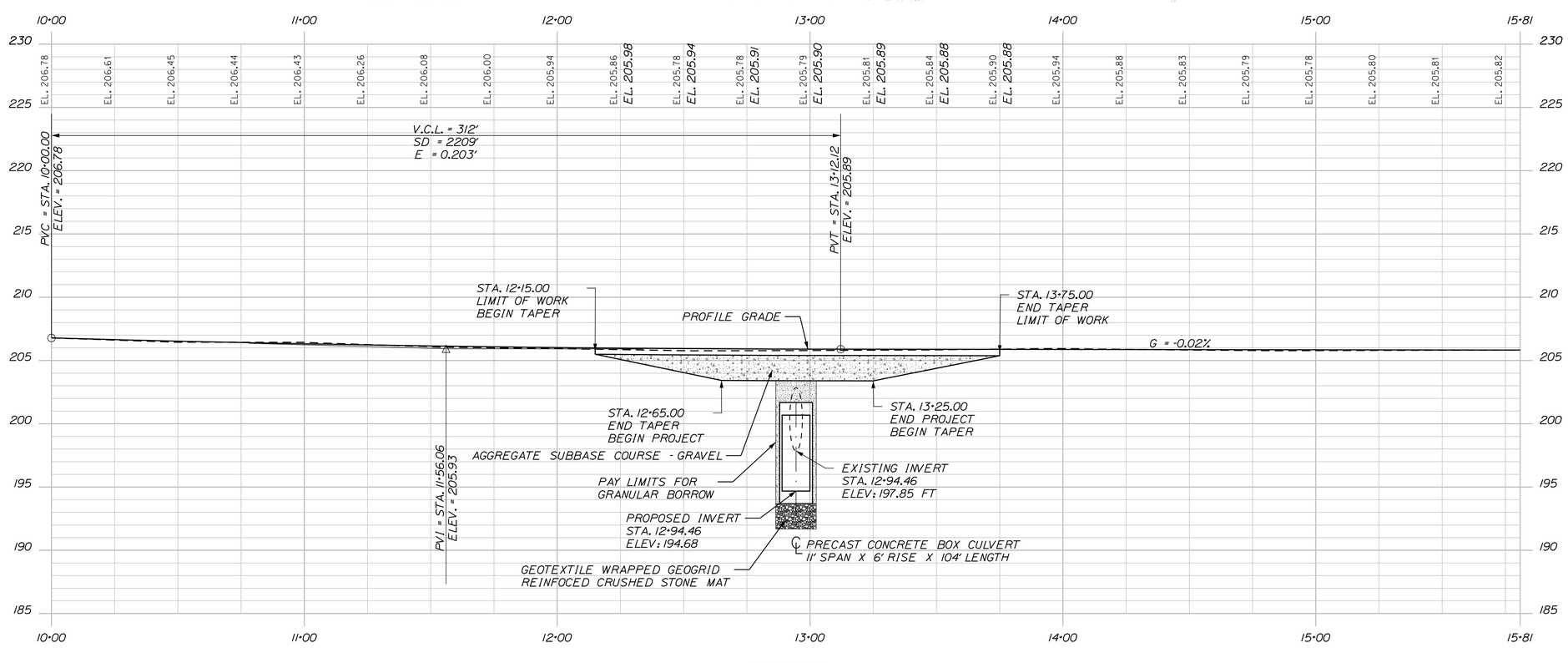
EXISTING CHANNEL DIVERSION LIMITS

RBE, LLC
ITEM NO. (1)
DRAINAGE EASE. = (1)
TEMP. CONST. RIGHTS = 855± S.F. (1)

DALE A. McKENNEY
JACOB McKENNEY
ITEM NO. (3)
DRAINAGE EASE. = (1)
TEMP. CONST. RIGHTS = 381± S.F. (1)
TOTAL AREA = 13.0± AC. (DEED)

PROFILE

Horiz. 25 0 25 50
Vert. 5 0 5 10
Scale of Feet



PROFILE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021770.00

WIN 021770.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	D. COOMBS	
DESIGN-DETAILED	N. HARTLEY	
CHECKED-REVIEWED	C.RUSSELL	OCT 2017
DESIGN2-DETAILED2	T.WHITE	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

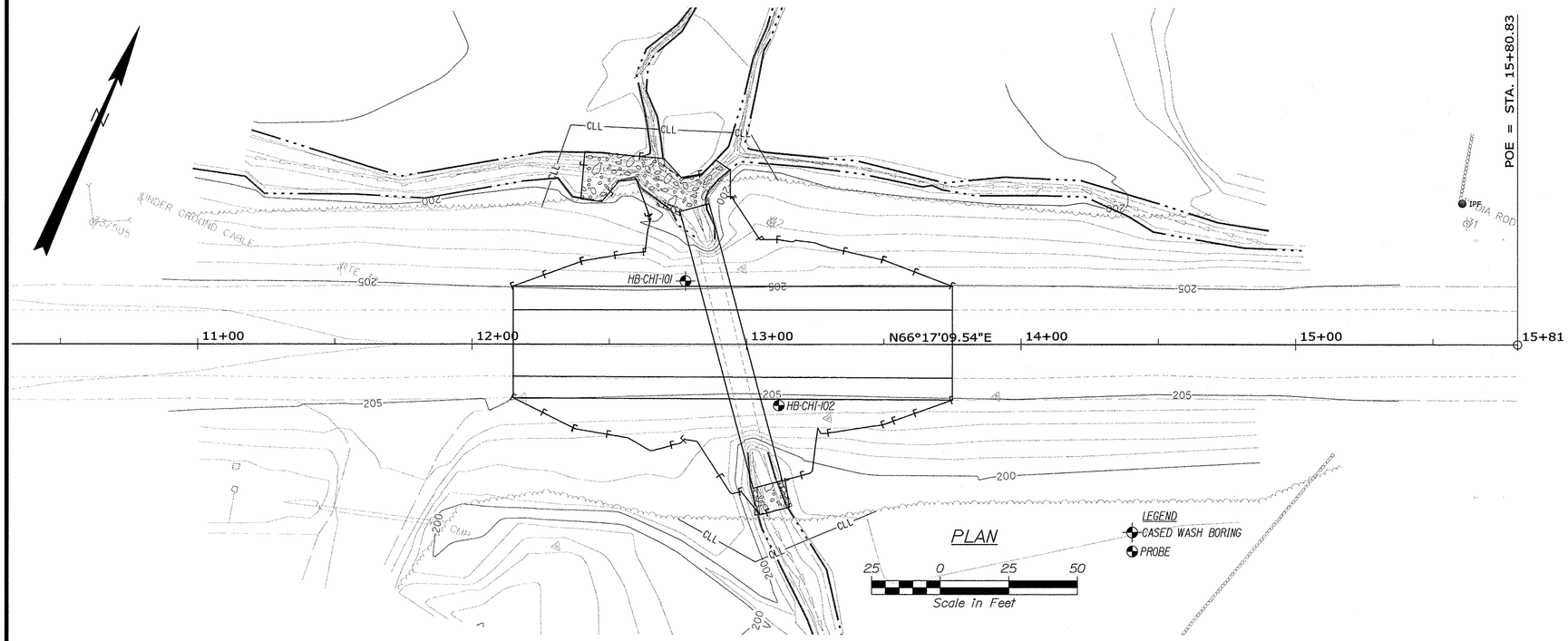
P.E. NUMBER

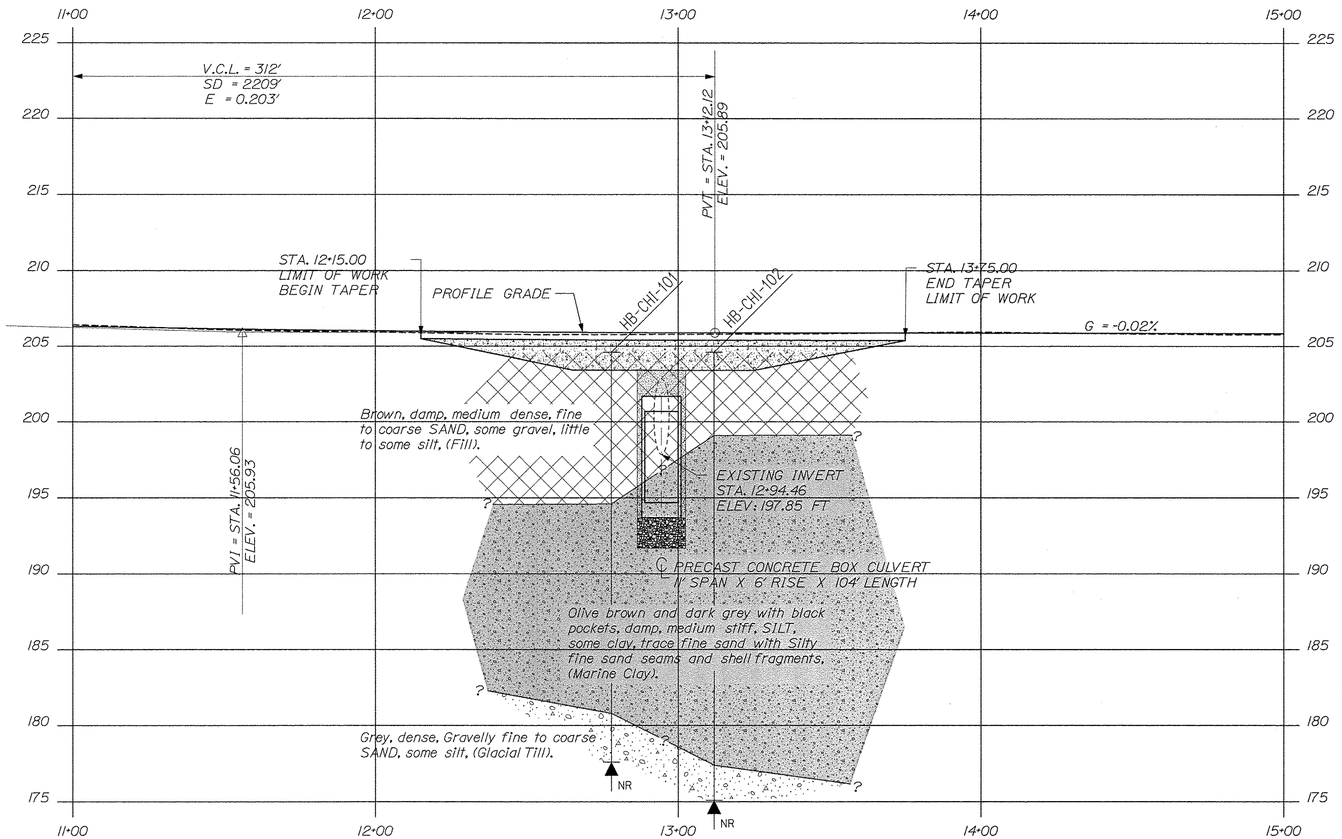
DATE

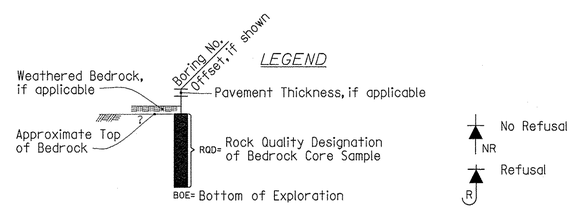
CHINA
ROUTE 3\202

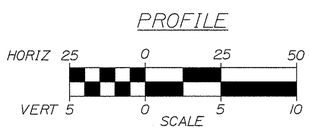
PLAN/PROFILE

SHEET NUMBER
3
OF 10









Note: This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and bedrock transitions may vary and are probably more erratic. For more specific information refer to the exploration logs.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021770.00

WIN 21770.00

BRIDGE NO. 6569

HIGHWAY PLANS

STATE OF MAINE ★ ENGINEER ★ PROFESSIONAL
Kathleen Maguire
7120
LICENSED

SIGNATURE
P.E. NUMBER
DATE 1/24/2018

		BY	DATE
PROJ. MANAGER	M. KIRKMANN		
DESIGN-DETAILED	N. HARTLEY		
CHECKED-REVIEWED			
DESIGN2-DETAILED2	C. RUSSELL	T. WHITE	OCT 2017
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CHINA
SOUTH CHINA BRIDGE-ROUTE 3\202

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER

4

OF 10

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: South China Bridge
#6569
Location: China, Maine
Routes 3/202

Boring No.: HB-CHI-101
WIN: 21770.00

Driller:	New England Boring	Elevation (ft.)	204.6	Auger ID/OD:	3.5" Solid Stem
Operator:	Dupuis/Maynard	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	Be Schanewald	Rig Type:	Mobile Drill B-53 (Truck)	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/12/2016: 10:05-12:40	Drilling Method:	Cased Wash Boring	Core Barrel:	N/A
Boring Location:	12+77.9, 22.9 ft Lt.	Casing ID/OD:	NW-3"	Water Level*:	None Observed
Hammer Efficiency Factor: 0.572		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer
MV = Unsuccessful Field Vane Shear Test Attempt WOH = Weight of One Person
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows I/6 in. Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	1D	24/13	0.00 - 2.00	6/10/9/7	19	18	SSA			Brown, damp, medium dense, fine to coarse SAND, some gravel, little silt. (Fill).	GW304254 A-1-b, SM WC=6.1%
5	2D	24/9	5.00 - 7.00	6/6/6/7	12	11	9			Brown, damp, medium dense, fine to coarse SAND, some silt, some gravel, (Fill).	GW304255 A-1-b, SM WC=9.1%
							11				
							11				
							8				
10							8			10.00	
	3D	24/22	10.00 - 12.00	1/4/7/9	11	10	7	194.6		Olive-brown, mottled, damp, stiff, SILT, some clay, trace fine sand, (Marine Clay).	GW304256 A-4, CL WC=26.0%
							16				
							21				
							24				
15							27				
	4D/MV	24/21	15.00 - 17.00	4/3/5/5	8	8	RC			Failed 55x110 mm vane attempt, unable to push. Dark grey with black pockets, damp, medium stiff, SILT, some clay, little to some fine sand with Silty fine sand seams and shell fragments, (Marine Clay).	#304257 Combined with 5D. A-4, CL-ML WC=23.9% LL=26 PL=19 PI=7
20	5D/MV	24/24	20.00 - 22.00	2/3/2/2	5	5				Failed 55x110 mm vane attempt, unable to push. Dark grey, damp, medium stiff, SILT, some clay, trace fine sand with 2 at 1/4-inch seams Silty fine to medium sand and one rounded gravel drop stone.	Combined with 4D.
	V1		22.20 - 22.57	Su=1429/357 psf						55x110 mm vane raw torque readings: V1: 32.0/8.0 ft-lbs	
										23.80	
								180.8		Stratum change to denser, boney material.	
25	6D	24/9	25.00 - 27.00	20/32/17/21	49	47				Grey, dense, Gravelly fine to coarse SAND, some silt, (Glacial Till).	GW304258 A-1-b, SM WC=7.6%
								177.6		27.00	
30										Bottom of Exploration at 27.00 feet below ground surface. NO REFUSAL	
35											
40											
45											
50											

Remarks:
Note: Streambed in dry.

Stratification lines represent approximate boundaries between soil typesl transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: HB-CHI-101

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: South China Bridge
#6569
Location: China, Maine
Routes 3/202

Boring No.: HB-CHI-102
WIN: 21770.00

Drilling Contractor:	New England Boring	Elevation (ft.)	204.6	Auger ID/OD:	3.5" Dia.
Operator:	Dupuis/Maynard	Datum:	NAVD88	Sampler:	N/A
Logged By:	Be Schanewald	Rig Type:	Mobile Drill B-53 (Truck)	Hammer Wt./Fall:	N/A
Date Start/Finish:	10/12/2016: 08:40-09:40	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	13+11.6, 22.2 ft Rt.	Casing ID/OD:	N/A	Water Level*:	21.0 ft bgs (open)

Definitions:
D = Split Spoon Sample
S = Sample off Auger Flights
B = Bucket Sample off Auger Flights
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOP = Weight of 1 Person
WOR/C = Weight of Rods or Casing
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-value = Raw Field SPT N-value
RC = Roller Cone
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows I/6 in. Shear Strength (psf) or RQD (%)	N-value	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0						SSA			Auger Cuttings: 0.0-5.0 ft bgs, Brown, Gravelly fine to coarse SAND, little silt, (Fill).	
5							199.1		5.50	
									Apparent change at 5.5 ft bgs to Olive brown, SILT based on drilling behavior and auger cuttings.	
10										
							193.6		11.00	
15									Apparent change at 11.0 ft bgs to Blue grey, SILT with fine sand based on drilling behavior and auger cuttings.	
20										
25										
							177.4		27.20	
30							175.1		Apparent change at 27.2 ft bgs to Glacial Till based on drilling behavior.	
35									29.50	
40									Bottom of Exploration at 29.50 feet below ground surface. NO REFUSAL	
45										
50										

Remarks:

Stratification lines represent approximate boundaries between soil typesl transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: HB-CHI-102

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021770.00

WIN
21770.00

HIGHWAY PLANS

BRIDGE NO. 6569

STATE OF MAINE
Kathleen Maguire
7120
REGISTERED PROFESSIONAL ENGINEER

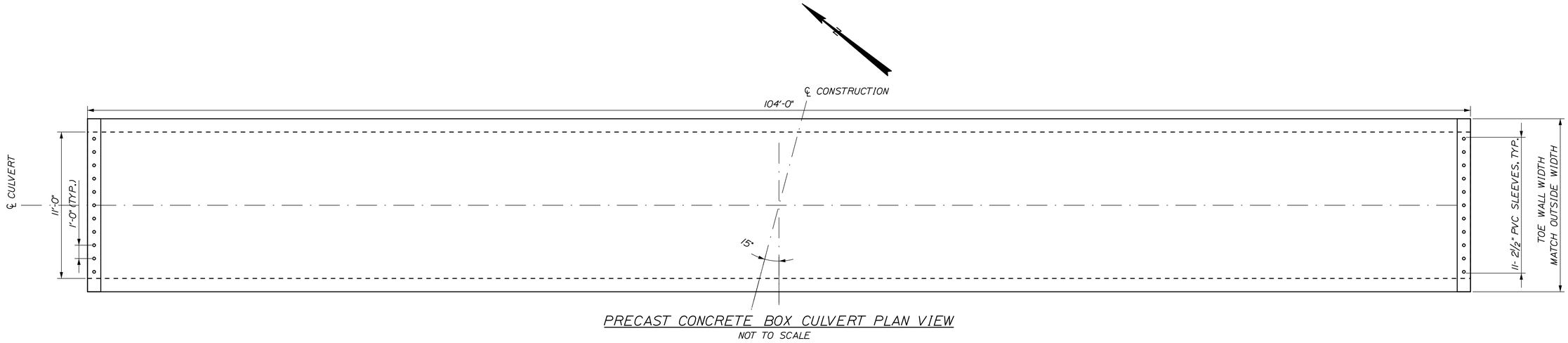
SIGNATURE
P.E. NUMBER 7120
DATE 1/26/2018

	BY	DATE
PROJ. MANAGER	M. KIRKMANN	
DESIGN-DETAILED	N. HARTLEY	
CHECKED-REVIEWED	-----	-----
DESIGN2-DETAILED2	C.RUSSELL	JAN 2018
DESIGN3-DETAILED3	T.WHITE	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

CHINA
SOUTH CHINA BRIDGE-ROUTE 3\202

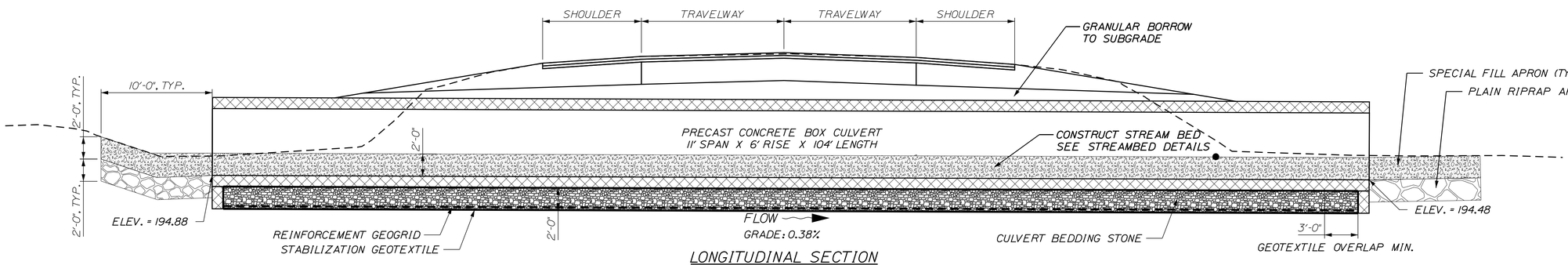
BORING LOGS

SHEET NUMBER
5
OF 10



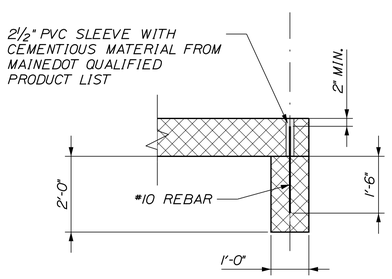
PRECAST CONCRETE BOX CULVERT PLAN VIEW

NOT TO SCALE



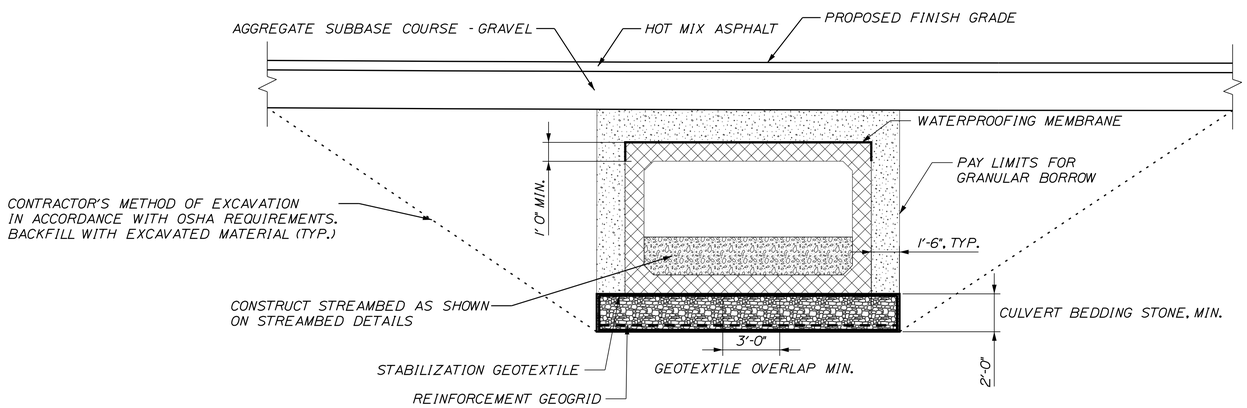
LONGITUDINAL SECTION

SKEW 15° BACK ON LEFT
NOT TO SCALE



PRECAST CONCRETE TOE WALL DETAIL

NOT TO SCALE



TYPICAL PRECAST CONCRETE BOX CULVERT SECTION

NOT TO SCALE

PRECAST CONCRETE BOX CULVERT NOTES

1. CONSTRUCTION, HANDLING, AND ASSEMBLY OF THE PRECAST UNITS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS APPLICABLE.

2. THE CONTRACTOR SHALL USE A "CLAMSHELL" TYPE STRUCTURE. JOINING OF THE TOP AND BOTTOM SECTIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021770.00

WIN
021770.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	D COOMBS	
DESIGN-DETAILED	N HARTLEY	
CHECKED-REVIEWED	----	
DESIGN2-DETAILED2	C.RUSSELL	OCT 2017
DESIGN3-DETAILED3	----	----
REVISIONS 1	----	----
REVISIONS 2	----	----
REVISIONS 3	----	----
REVISIONS 4	----	----
FIELD CHANGES	----	----

SIGNATURE

T WHITE

P.E. NUMBER

DATE

CHINA
ROUTE 3\202

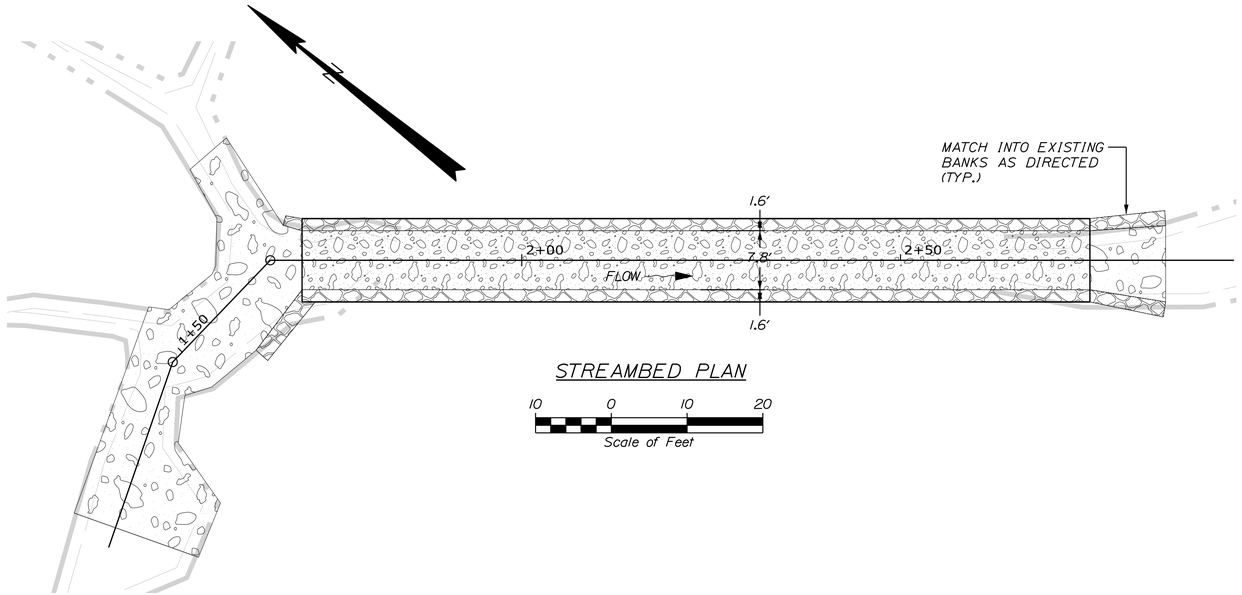
PRECAST CONCRETE BOX CULVERT DETAILS

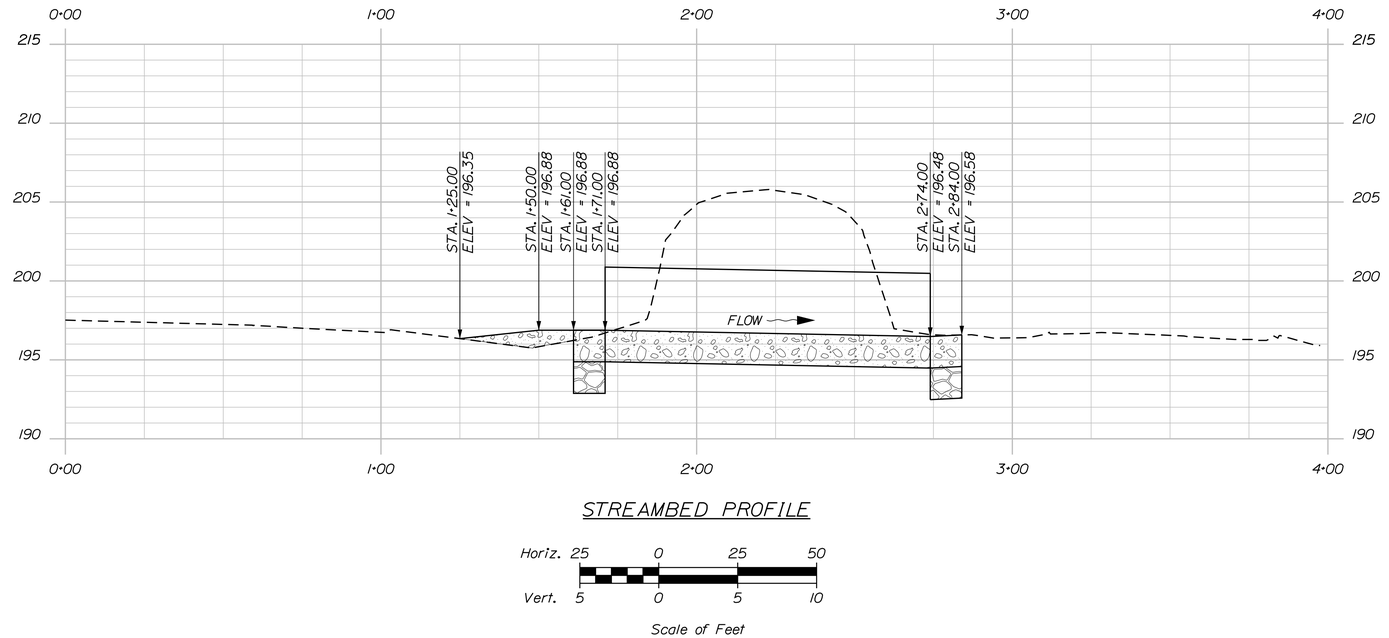
SHEET NUMBER

6

OF 10

Filename: ...\MSTA\006_CulvertDetail.dgn Division: HIGHWAY Username: nicholas.w.hartley Date:1/25/2018





STREAMBED NOTES

1. STREAM BANKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIAL PROVISION 610 - STREAM CHANNEL ROCK

2. SPECIAL FILL SHALL BE PLACED IN ACCORDANCE WITH SPECIAL PROVISION 203 - SPECIAL FILL.

2. SPECIAL FILL SHALL BE PLACED IN THE CULVERT SO AS TO NOT DAMAGE THE CULVERT. ANY DAMAGE SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT AT THE CONTRACTOR'S EXPENSE.

3. THE CONTRACTOR SHALL RELEASE THE COFFERDAMS IN A MANNER SO AS TO NOT DAMAGE OR MOVE THE STREAMBED MATERIAL. ANY DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

4. DIMENSIONS WITHOUT TOLERANCES ARE INTENDED TO BE NOMINAL. NO FINE GRADING OF THE STREAMBED WILL BE REQUIRED.

5. CONSTRUCTED BANKS WITHIN THE STRUCTURE SHALL TAPER TO MATCH EXISTING BANKS AT THE END OF THE APRON. CROSS SECTIONAL SHAPE AT THE END OF THE APRON SHALL REMAIN UNCHANGED.

6. GRADES BETWEEN ANNOTATED ELEVATIONS ARE INTENDED TO BE LINEAR.

7. STREAMBED SHALL BE GRADED TO THE ROUGHLY MATCH EXISTING SHAPE.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021770.00

WIN
021770.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	D. COOMBS		
DESIGN-DETAILED	N. HARTLEY	----------	---
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	C.RUSSELL	T.WHITE	OCT 2017
DESIGN3-DETAILED3	----------	----------	----------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

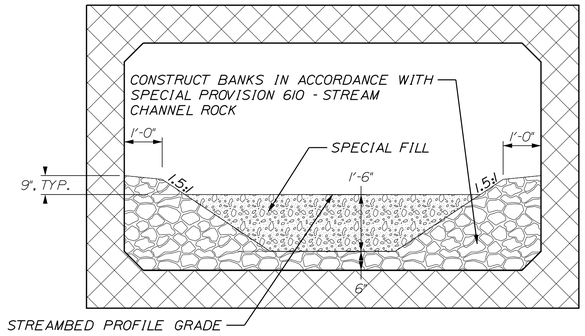
CHINA
ROUTE 3\202

STREAMBED DETAILS

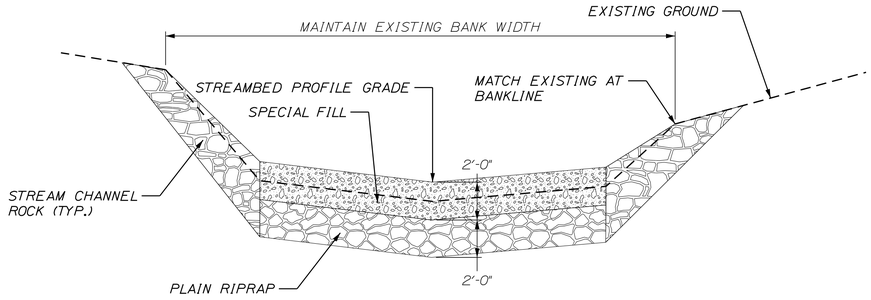
SHEET NUMBER

7

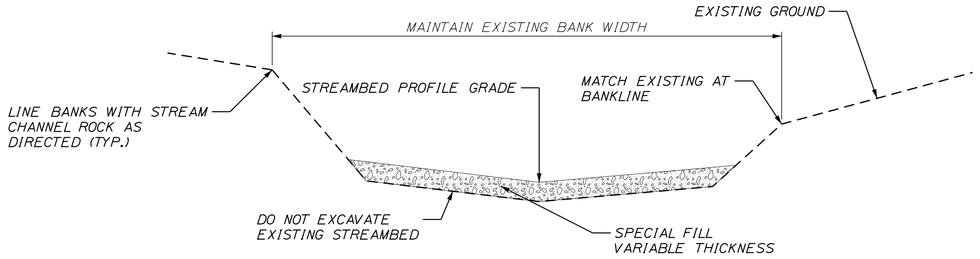
OF 10



TYPICAL BOX STREAM SECTION
NOT TO SCALE
STA. 1+71 TO STA. 2+74



TYPICAL APRON SECTION
NOT TO SCALE
STA. 1+61 TO STA. 1+71 AND STA. 2+74 TO STA. 2+84



TYPICAL STREAM SECTION
NOT TO SCALE
STA. 1+25 TO STA. 1+61

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021770.00

WIN
021770.00

HIGHWAY PLANS

PROJ. MANAGER	D. COOMBS	BY	DATE
DESIGN-DETAILED	N. HARTLEY	----------	----
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	C.RUSSELL	T. WHITE	OCT 2017
DESIGN3-DETAILED3	----------	----------	----------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

CHINA
ROUTE 3\202

STREAMBED DETAILS

SHEET NUMBER

8

OF 10

Username: nicholos.w.hartley Date:1/25/2018

Filename: ...\MSTA\009_XSECT_12+81_001.dgn Division: HIGHWAY

PROJ. MANAGER	D. COOMBS	BY	DATE
DESIGN-DETAILED	N. HARTLEY	----------	---
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	C.RUSSELL	T.WHITE	OCT 2017
DESIGN3-DETAILED3	----------	----------	----------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021770.00

WIN
021770.00

HIGHWAY PLANS

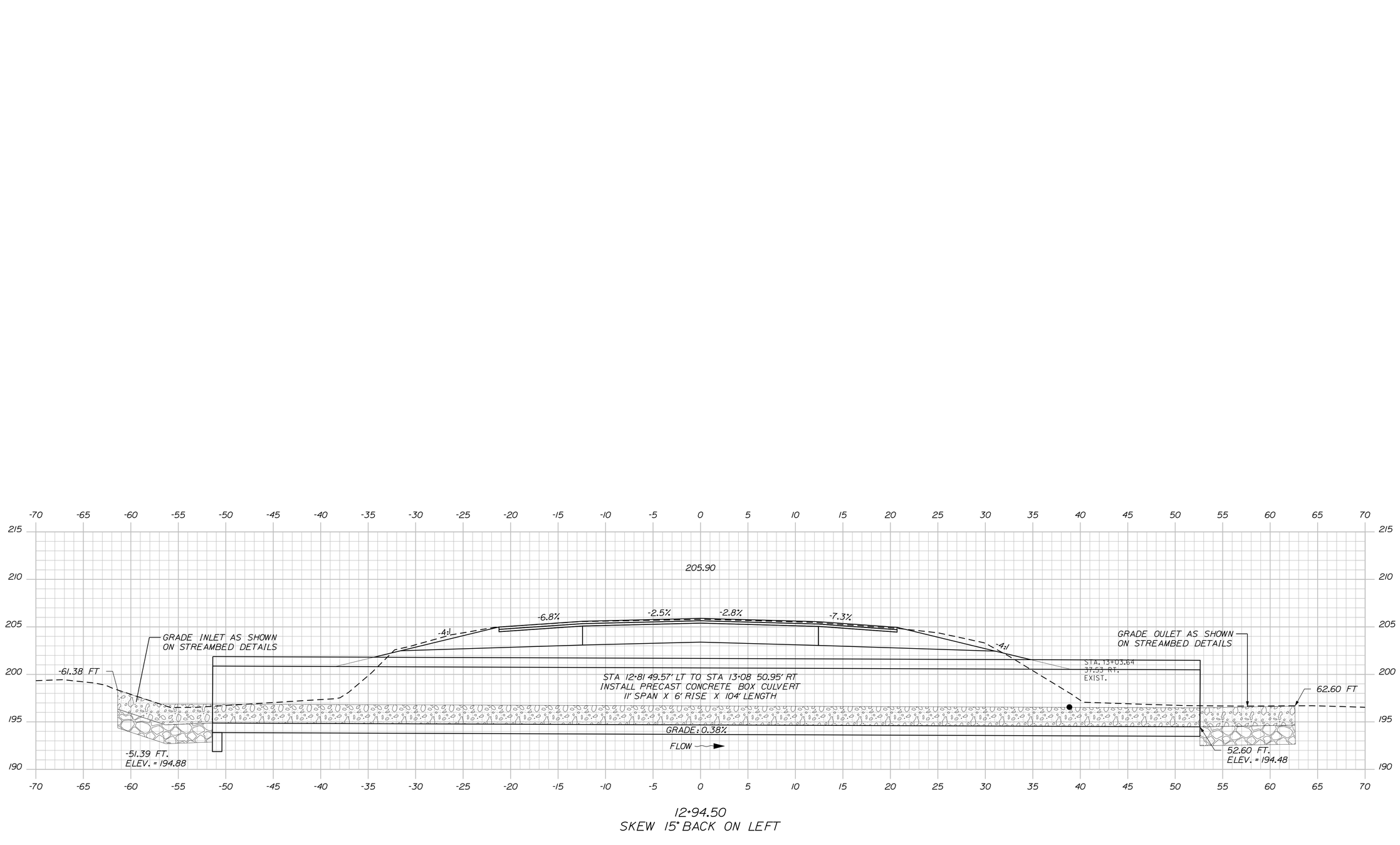
CHINA
ROUTE 3\202

CROSS SECTIONS

SHEET NUMBER

9

OF 10



12+94.50
SKEW 15° BACK ON LEFT

Sta. 12+81.00 to Sta. 12+94.50

PLAN LEGEND

Town, County, State		New R/W Along Existing R/W		Sanitary Sewer		Traveled Way	
Approx. Property Lines	P.L.	Building	Clearing Limit Line CLL	Telephone Line		Ditch	
Existing Right of Way		Trees Conifer	Deciduous	Electric Line		Catch Basin	
Limits of Wrought Portion	L.O.W.P.	Tree Line	Bush Line	Water Line		Manhole	
Control Of Access	C.O.A.	Water Edge		Underdrain Line		Sewer Manhole	
New Right of Way		Ledge	Rock/Boulder Flag Pole	Gas Line		Utility Pole	
New Easement		Fence CHAIN LINK	BARB WIRE STOCKADE	Guardrail		Fire Hydrant	
New Temporary Rights		Sign	Well WELL Mailbox	Culvert		Curbing	
New R/W Within Existing R/W							

Cut Line C C C		Fill Line F F F	
Stonewall		Retaining Wall	
Baseline 10+00	11+00 12+00	Monument	Traverse Point
Iron Rod Found IRF		Pipe Found IPF	
Replacement Pin Set			

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and recorded in
Plan Book _____, Page _____
Attest: _____
REGISTER

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

DONALD FARRELL

DUSTY L. HASKELL
PAMELA M. HASKELL

GRID
HORIZONTAL DATUM=US STATE PLANE MAD83(2011)
ZONE=MAINE 2000 CENTRAL
VERTICAL DATUM=NAVD 88
COMBINED FACTOR=0.999910250

STEVEN P. COOK
PAULA E. COOK
ITEM NO. (2)
DRAINAGE EASE. = (1)
TEMP. CONST. RIGHTS = 1326± S.F. (1)
TOTAL AREA = 2.0± AC. (TAX RECORDS)

FLOW

INLET DRAINAGE STRUCTURE
STA. 12+85± LT.

P.L.

POB = STA. 10+00.00

POE = STA. 15+80.83

EXISTING CHANNEL DIVERSION

TEMPORARY CONSTRUCTION CLL

1326± S.F.

LIMITS

EXISTING DITCH DRAINAGE

UNDERGROUND CABLE

RTE 32

TO PALERMO

TO VASSALBORO

10+00 U.S. ROUTE 202 ROUTE 32 ROUTE 3 ROUTE 9 S.H. "28" 11+00 BEGIN B.L. 12+00 +33 +50 13+00 +18 +14± +18± +50 14+00 N66°17'09.5"E 400.00' 15+00 END B.L. 15+81

855± S.F.

381± S.F.

TEMPORARY CONSTRUCTION CLL

CLL LIMITS

EXISTING CHANNEL DIVERSION LIMITS

OUTLET DRAINAGE STRUCTURE
STA. 13+10± RT.

DALE A. McKENNEY
JACOB McKENNEY
ITEM NO. (3)
DRAINAGE EASE. = (1)
TEMP. CONST. RIGHTS = 381± S.F. (1)
TOTAL AREA = 13.0± AC. (DEED)

RBE, LLC
ITEM NO. (1)
DRAINAGE EASE. = (1)
TEMP. CONST. RIGHTS = 855± S.F. (1)
TOTAL AREA = 20.0± AC. (CALC.)

R/W REFERENCE
S.H.C. FILE NO. 6-104 (1959)
SHEET NO. 4

WIN 021770.00

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	D.W.B.	
FINAL RIGHT OF WAY	D.W.B.	D.W.B.
AREAS	D.W.B.	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
CHINA
RIGHT OF WAY MAP

REVISIONS NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	1/16/18	12821	157

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "28"
US ROUTE 202, ROUTE 32 + ROUTE 3
CHINA KENNEBEC COUNTY
STATE PROJECT NO. 21770.00

AUGUST 2017 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 6-X
SCALE 1"= 25' | SHEET 1 OF 1

SHEET NUMBER
10
OF 10